21. (New) The method of claim 16, wherein the at least one neighbor AP is an AP to which the STA can roam without passing through a coverage area of another AP.

22. (New) The method of claim 21, wherein the STA attempts to associate with the AP by roaming from the at least one neighbor AP.

23. (New) In a wireless network having an authentication server and a plurality of access points (APs) connected to the authentication server, a method of supporting a roaming service in one of the plurality of APs, comprising:

receiving from the authentication server a first-level security key derived from a known master key when a station (STA) attempts to associate with an AP;

deriving from the first-level security key a second-level security key for at least one neighbor AP, the at least one neighbor AP neighboring to the AP with which the STA attempts to associate; and

providing to the at least one neighbor AP the second-level security key,

wherein when the STA attempts to roam to the at least one neighbor AP, the at least one neighbor AP pre-authenticates the STA with the second-level security key.

24. (New) The method of claim 23, wherein the first-level security key is a first-level pairwise master key and the second-level security key is a second-level pairwise master key.

25. (New) The method of claim 24, further comprising deriving from the first-level pairwise master key a pairwise transient key.

26. (New) The method of claim 24, further comprising deriving from the second-level pairwise master key in the at least one neighbor AP a pairwise transient key.

27. (New) The method of claim 24, wherein deriving a second-level security key for at least one neighbor AP from the first-level security key comprises deriving from the first-level pairwise master key the second-level pairwise master key, considering a Medium Access Control (MAC) address of the STA.